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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,150	12/31/2001	Young Jun Jung	K-0383	5205
34610	7590	03/03/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			CHEA, PHILIP J	
			ART UNIT	PAPER NUMBER
			2153	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/029,150		JUNG, YOUNG JUN	
	Examiner		Art Unit	
	Philip J. Chea		2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to a Request for Continued Examination filed January 31, 2006. Claims 1-4,6-13,15-18 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,2,7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar et al. (US 6,266,701), herein referred to as Sridhar, and further in view of Gauvin et al. (US 5,790,800), herein referred to as Gauvin.

As per claims 1,7, Sridhar discloses (a) receiving a message transmission request from a connectionless-oriented user, said request including a stream-based message and a destination address of said stream-based message (see column 19, lines 14-17, where a request to connect inherently contains a message and a destination address, and connectionless-oriented user is considered user making an HTTP request and column 18, lines 25-31, for support of stream-based messages);

(b) determining whether any one of currently existing sockets, whose file descriptors are stored in a socket management database, is connected to said destination address (see column 19, lines 20-22); and

(c) sending a connection request to a connection manager to be connected to a TCP (transmission control protocol) layer to provide a connection-oriented service to the connectionless-oriented user, if it is determined in the step (b) that none of the existing sockets are connected to said destination address (see column 19, lines 36-56, where connection-oriented service is considered TCP).

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[claim 7] a connection manager creating a new socket connected to said destination address and attempting to connect said module with said TCP layer after receiving said connection request from said module (see column 19, lines 47-56).

Although the system disclosed by Sridhar shows substantial features of the claimed invention (discussed above), it fails to disclose a router.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sridhar, as evidenced by Gauvin.

In an analogous art, Gauvin discloses that a gateway and router are similar and can be used interchangeably to provide access to servers (see Fig. 100).

Given the teaching of Gauvin, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sridhar by employing the functionality of a gateway in a router, such as disclosed by Gauvin, in order to provide login services for remote access to servers.

As per claims 2,8, Sridhar in view of Gauvin further discloses sending said message to said TCP layer if it is determined in the step (b) that any one of said existing sockets is connected to said destination address (see Sridhar column 19, lines 14-20).

As per claims 3,9, Sridhar in view of Gauvin further discloses creating a new socket connected to said destination address and attempting to be connected to said TCP layer (see Sridhar column 19, lines 47-56); and

storing a new file descriptor of said new socket in said database if said attempt is succeeded (see Sridhar column 19, lines 47-51).

As per claims 4,10, Sridhar in view of Gauvin further discloses newly forming a receiving module for said new socket (see Sridhar column 19, lines 57-63, where it is implied that any new socket is able to communicate using a receiving module).

As per claim 11, Sridhar in view of Gauvin further discloses waiting to receive another connection request if said attempt is not succeeded (see Sridhar column 20, lines 37-41).

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3. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar in view of Gauvin as applied to claim 1 above, and further in view of Vincent et al. (US 6,839,732).

Although the system disclosed by Sridhar in view of Gauvin shows substantial features of the claimed invention (discussed above), it fails to disclose informing said user of an incomplete message transmission, if not connected to TCP layer for a given period of time.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sridhar in view of Gauvin, as evidenced by Vincent et al.

In an analogous art, Vincent et al. discloses a socket pool for transmitting data, provided that there is an available socket in the pool to use for transmission further disclosing informing a user of an incomplete message if not connected to the TCP layer for a given period of time (see column 7, lines 16-34).

Given the teaching of Vincent et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sridhar in view of Gauvin by informing the user of an incomplete transmission, such as disclosed by Vincent et al., in order to give the user a reasonable estimate of the pool size and resources required to process the request.

4. Claims 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar in view of Gauvin as applied to claim 7 above, and further in view of Internet Protocol Specification.

As per claim 12, although the system disclosed by Sridhar in view of Gauvin shows substantial features of the claimed invention (discussed above), it fails to disclose a message header including a message header indicator, a message length, a source address, a destination address and a message identifier.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sridhar in view of Gauvin, as evidenced by the Internet Protocol Specification.

In an analogous art, the Internet Protocol Specification that is used for transmission of data over an IP network discloses a message header including a header indicator (see page 11, Figure 4).

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[Version]), a message length (see page 11, Figure 4. [IHL]), a source address (see page 11, Figure 4. [Source Address]), a destination address (see page 11, Figure 4. [Destination Address]), and a message identifier (see page, Figure 4. [Protocol]).

Given the teaching of the Internet Protocol Specification, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sridhar in view of Gauvin by describing the message header that is used in an IP network, such as disclosed by the Internet Protocol Specification, in order to allow efficient transmission of data using IP packets.

As per claim 13, Sridhar in view of Gauvin in view of the Internet Protocol Specification further disclose sending the message together with a header to TCP layer using a new socket (see Sridhar column 19, lines 47-56).

As per claim 15, Sridhar in view of Gauvin in view of Internet Protocol Specification disclose receiving a message transmission request from a connectionless-oriented user at a connection-oriented router (see Sridhar column 19, lines 14-16);

formatting the message into a connection-oriented protocol data unit (PDU) including a source address of the connectionless-oriented user and a destination address (see Sridhar column 19, lines 47-56, where source address and destination address are implied by using TCP as shown above); and

transmitting the message through an existing connection-oriented socket connected to the destination address if the socket exists (see Sridhar column 19, lines 17-20).

As per claim 16, Sridhar in view of Gauvin in view of Internet Protocol Specification further disclose creating a new connection-oriented socket to the destination address if the existing connection-oriented socket does not exist (see Sridhar column 19, lines 47-56); and

transmitting the message to the destination address using the new connection-oriented socket (i.e. new socket is now handling communication).

As per claim 17, Sridhar in view of Gauvin in view of Internet Protocol Specification further disclose determining if the existing connection-oriented socket connected to the destination address exists by reading a database including all existing sockets (see Sridhar column 19, lines 20-22).

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As per claim 18, Sridhar in view of Gauvin in view of Internet Protocol Specification further disclose that the connection-oriented router comprises a Transmission Control Protocol (TCP) router including a TCP layer (see Sridhar columns 19 and 20, lines 60-67 and 1-2).

Response to Arguments

5. Applicant's arguments filed December 7, 2005 have been fully considered but they are not persuasive.

6. Applicant's arguments with respect to claims 1-4,6-13,15-18 have been considered but are moot in view of the new ground(s) of rejection.

(A) Applicant contends Sridhar does not disclose a message transmission request from a connectionless-oriented user.

(B) Applicant contends Sridhar does not disclose determining whether any one of currently existing sockets is connected to a destination address.

(C) Applicant contends Sridhar does not disclose providing a connection-oriented (e.g. wired) service to the connectionless-oriented (e.g. wireless) user, if it is determined that none of the existing sockets are connected to the destination address.

In considering (A), the Examiner respectfully disagrees. The message transmission disclosed in Sridhar is HTTP protocol. It is well known in the art that HTTP is a connectionless protocol. The Examiner invites the Applicant to clearly identify that connectionless-oriented refers to communication performed by a mobile device.

In considering (B), the Examiner respectfully disagrees. Sridhar shows looking up a handle in a socket association table of sockets that are connected to host addresses. The Examiner believes that this is enough evidence to support the claim limitation of determining whether any one of currently existing sockets is connected to a destination address.

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In considering (C), the Examiner respectfully disagrees. It is not clear in the claim language or disclosure that a connectionless-oriented user is considered a wireless connection user and a connection-oriented service is considered a wired service. The Examiner reads Sridhar as providing a connection-oriented (e.g. TCP/IP) service to a connectionless-oriented (e.g. HTTP request) user, if it is determined that none of the existing sockets are connected to the destination address (HTTP server).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea
Examiner
Art Unit 2153

PJC 2/22/06



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